



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
FOLSOM FIELD OFFICE
63 NATOMA STREET
FOLSOM, CA 95630

Decision Memorandum and Categorical Exclusion Documentation CE # CA-180-08-52

A. Project Title: Woodrat live trapping research

B. Description and Rationale:

1) The benefit to the BLM from the study. This project will identify the fine-scale distribution of *Neotoma fuscipes* and *Neotoma macrotis* near the Middle and South Forks of the American River. When I began surveying this area 5 years ago, no woodrats had been documented anywhere between the Auburn and Placerville areas (as recorded in museums). Furthermore, only one species was thought to even come near this region. Given my group's preliminary efforts, we now know that this region is occupied (9 locations; Figure 1) by two distinct species of woodrats. Our goal in the current field season is to resolve the fine scale distribution of these species at various points (Figures 2 and 3), especially where they come into proximity of one another or even contact.

At its most basic level, our research has substantially enhanced our knowledge of the biodiversity of this region and our planned activities will further refine our understanding of the distribution of these unique members of our native fauna on BLM property. The basic distributional data we hope to gather in this first field season will establish the groundwork for further studies focusing on the ecology of these two evolutionarily distinct species and what type of behavioral dynamics characterize the areas in which they come into contact/proximity of one another. Identifying ecological and behavioral dynamics of species at the very limits of their distributions, as both species reach in this area, is fundamental to our understanding of the processes that generate and maintain biodiversity and the primary source of data for modeling the impacts of climate change.

2) Dates when the activities will take place. For the coming year, our goal is to survey as much public and private property in the overall study area as access agreements will allow. Because of the academic schedule and other ongoing research in my lab, our major effort in this area will occur between April and end of June 2008 but will continue after that on a more sporadic basis (*i.e.* short fieldtrips of 3-4 days when I can get away from campus).

3) A description of activities, including site maps, number of traps per site and a copy of your State permit(s). Because woodrats build conspicuous houses in the environment, our approach is to trap right at the houses as opposed to traditional grid trapping where you hope to simply intercept a small mammal as it is running through the environment. As such, the precise design of any one night of trapping is entirely dependent on the distribution/density of woodrat houses at a location. As a general rule, a crew of two can typically set approximately 60 traps in a late afternoon/evening. We run those same traps for three nights and then move them to the next set of 60 houses we would like to trap and so on until an area has been surveyed. As an example, from the eastern corner of Cronan Ranch (Figure 3, horseshoe/circled area) that we were able to survey by foot (walking on the trail that goes along the river), from having parked

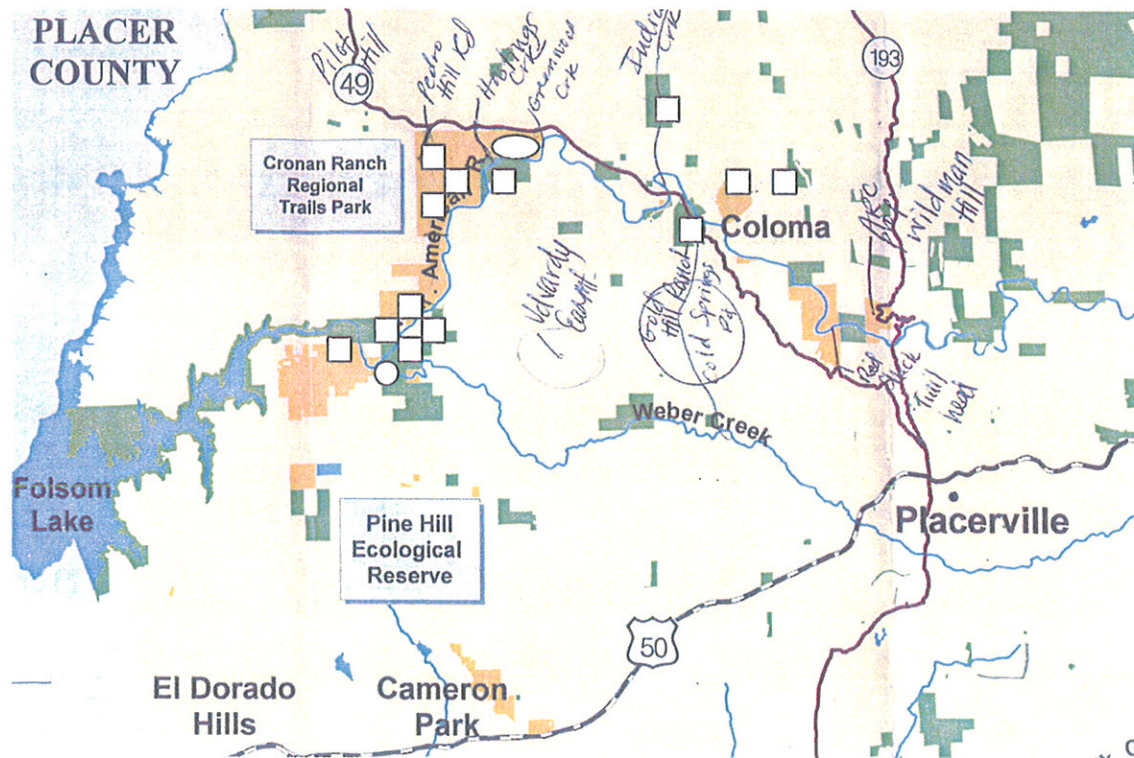
our truck in the eastern parking lot right off Hwy 49, I estimate that we could reasonably walk traps far enough in to survey for probably one 3-night session. That is, without having actually counted, I think there are probably about 60 houses within walking distance of the parking lot area...walking distance with about 50-60 pounds of traps on your back, that is. We did not survey the remainder of the Ranch with the hopes that we could discuss special access along the service road that is beyond the gate at the Pedro Hill parking lot.

Methodological details of trapping: Our methods will include visual surveys of the areas to identify sign of active woodrat occupancy (visual evidence of middens with fresh vegetation and fecal pellets on their exterior--middens will not be disturbed). We will live-trap using Tomahawk chipmunk-sized traps. Traps are baited with a peanut-butter/oat mixture and cotton bedding is provided for warmth. Traps are set in the evening hours, checked and opened again throughout the night and checked and closed by early daylight hours. In certain conditions of particularly rough terrain that is difficult to navigate in the dark, traps will only be cleared and closed in the earliest daylight hours before the temperature rises and any traps would be exposed to sunlight.

Upon being trapped, woodrats are removed from the trap by being encouraged to walk into a pillowcase or sack put over the opening of the trap. Blowing a puff of air on their rump usually motivates them adequately. Animals will never be shaken out of a live-trap into the sack. Once in the bag, the individual is weighed. After weighing, the handler secures the anterior portion of the woodrat through the sack and essentially 'peels' back the pillowcase allowing the head and posterior end to be exposed. One member of the field team is dedicated to handling the woodrats so that both hands can be used to keep the animal safely secured. The handler's one hand is around the forelimbs and the other hand holds the small of the back which insures that an animal is safely held while the other field team members collect data. Location, weight, sex, parasite load and reproductive condition will be recorded. A fingerling eartag (National Band and Tag) will be applied to the base of one ear near the joining of the ear and head. Once marked, we will take a small ear biopsy (approximately 2-3 mm²) for genetic analysis. Animals will be released and visually monitored to ensure that they re-enter a midden or retreat to an arboreal location indicating recovery from the handling process. In order to capture and mark a substantial portion of the population occupying a particular location, we plan to run approximately 60 traps for 3 nights and then to move on to a new survey location. As such, individuals may be re-trapped several times in a survey period which would be expected given my past experience...these animals are easily described as 'trap-happy'.

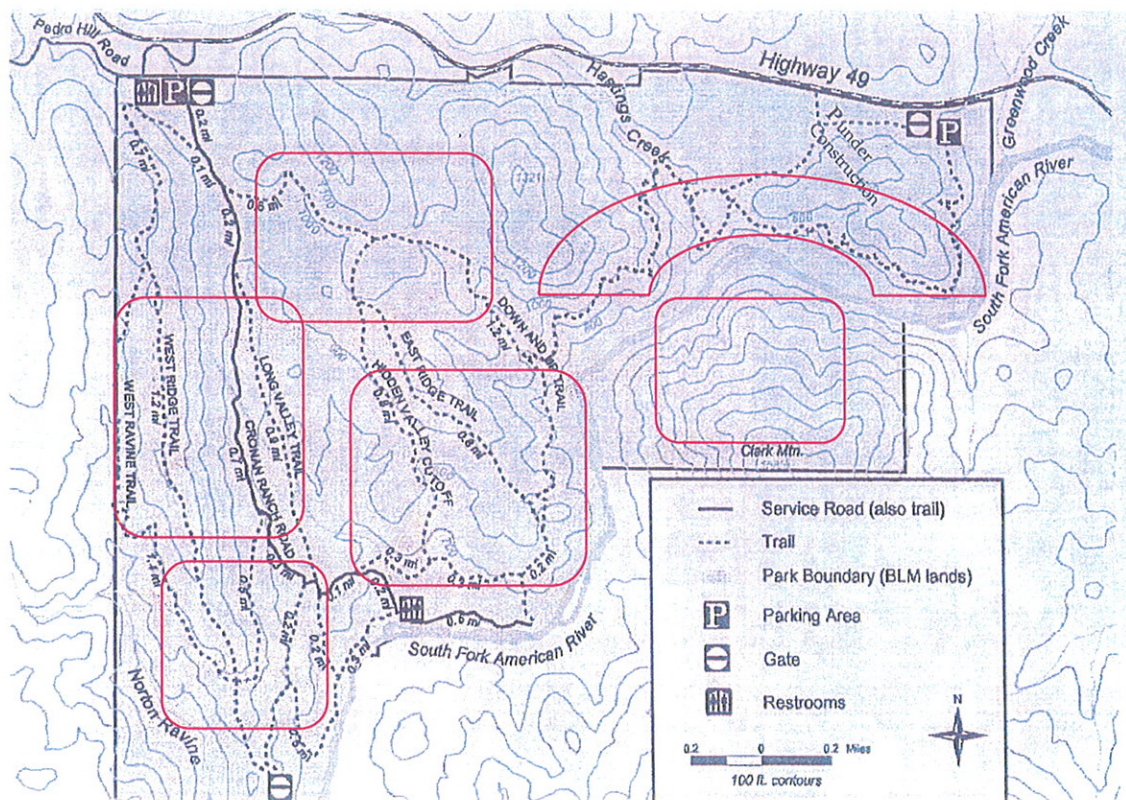
4) Provide information about the people doing the work. John Bender and Hillary Squires are employees of Idaho State University. Their pay comes through the University although the ultimate source of their funding is through my current National Science Foundation grant for this research. Bender and Squires are covered under the Idaho State Worker's Compensation provisions meaning that injury incurred as a result of the conduct of their duties in the field would be covered by the State of Idaho.

C. Location: General areas of interest for woodrat surveys are areas near Coloma, Pilot Hill, and Cameron Park, California. Because our work is only beginning and nearly nothing is known about the distribution of woodrats in this area, the localities pointed out below are admittedly broad. Circles represent areas that we have already visually surveyed and that, based on rough visual estimates of density could be surveyed in one 3-day trap period. Squares are areas that we would like to visually survey with the potential to then develop a trapping schedule that would be amenable to BLM.



Pine Hill Reserve and nearby areas: We have visited the Dorado Ridge Trail Road, and there are a number of active woodrat houses along the border of the BLM property and this private road. In addition to trapping the Dorado Ridge Trail Road, we are interested in surveying up to 3 localities on each side of the north and south sides of the South Fork of the American River (total of 6 sites) in coordination with Graciela Hinshaw.

Cronan Ranch and Clark Mountain: From our current knowledge of the distribution of *N. fuscipes* and *N. macrotis* in this region (Figure 1), this is the highest priority area for our work. The horseshoe/circular area is what we have already surveyed by foot and could likely trap in a 3-day session. Squares in the central and western portion of Cronan Ranch and on Clark Mountain have not been surveyed so I am squaring-in areas that I think could be trapped in 3-day sessions if the densities are similar to the northeastern portion that we have surveyed. Likewise, we know nothing of Clark Mountain but we could access this area either by rafting across from Cronan or if we could obtain passage from the rafting company that has property along the bank of the South Fork separating Clark Mtn. from Hwy. 49.



Additional sites near Lotus, Coloma, Mt. Murphy. In coordination with Peggy Cranston, the Bacchi family has agreed to allow us to pass their land to access the BLM property along Indian Creek for an initial visual survey. We are not currently certain if the other potential sites marked below are accessible.

D. Stipulations/Mitigations:

- Camping locations and access will be closely coordinated with BLM personnel.
- A letter of authorization will be issued for the research.
- A Peet waste management system will be used to handle human waste while camping.
- A camp stove can be used with a valid camp fire permit.

E. Plan Conformance: This research project is in conformance with the Sierra Resource Management Plan, 2008.

F. Compliance with the National Environmental Policy Act: The project is a categorically excluded action under the following Department of the Interior categorical exclusion (516 DM 2.3A(2) 1.6 *Nondestructive data collection, inventory (including field, aerial, and satellite surveying and mapping), study, research, and monitoring activities.*

The proposed action has been reviewed to determine if extraordinary circumstances exist that would require further environmental analysis and documentation (516 DM 2, Appendix 2). None have been identified (see attached).

Peggy Cranston
Preparer

4/10/08
Date

Jayne Brown
NEPA Reviewer

4/14/08
Date

W. S. Haigh
William S. Haigh
Field Manager
Folsom Field Office

4/16/08
Date

**NEPA Compliance
Categorical Exclusion Review
CE #CA-180-08-52
Woodrat live trapping research**

The Department of the Interior Manual 516 2.3A (3) requires review of the following "extraordinary circumstances" (516 DM 2 Appendix 2) to determine if an otherwise categorically excluded action would require additional environmental analysis/documentation.

1) *Have significant impacts on public health or safety.*

☐ Yes ☒ No

2) *Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.*

☐ Yes ☒ No

3) *Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].*

☐ Yes ☒ No

4) *Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.*

☐ Yes ☒ No

5) *Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.*

☐ Yes ☒ No

6) *Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.*

☐ Yes ☒ No

7) *Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.*

☐ Yes ☒ No

8) *Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat.*

☐ Yes ☒ No

9) *Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.*

☐ Yes ☒ No

10) *Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).*

☐ Yes ☒ No


11) *Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).*

() Yes (X) No

12) *Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).*

() Yes (X) No

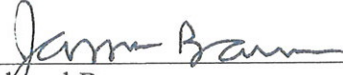
Reviewers:


Recreation


4/10/08


Botany

4/14/08


Cultural Resources

4/10/08


Wildlife

4/10/08